

Amendments to the Specification

Amend the paragraph beginning on the last line of page 3, as follows:

The present invention is based, at least in part, on the discovery of novel human and murine genes encoding novel proteins, which have sequence homologies with the interleukin-1 receptor antagonist protein (IL-1ra) as well as interleukin-1 (IL-1). The newly identified proteins and nucleic acids described herein are referred to as "IL-1L1s" and are exemplified here by both human and murine homologs of this gene. The human *hIL-1L1* gene (herein referred to as *hIL-1L1*) transcript is shown in Figure 1 and includes a 2562 nucleotide common sequence (SEQ ID No. 1) and two alternative 5' ends of 39 nucleotides (SEQ ID No. 2) and 42 nucleotides (SEQ ID No. 3). The *hIL-1L1* transcript includes 5' and 3' untranslated regions and a 465 nucleotide open reading frame (SEQ ID No. 4) encoding a 155 amino acid *hIL-1L1* polypeptide shown in Figure 3A (SEQ ID No. 5). The *hIL-1L1* gene is highly expressed in placental and, to a lesser extent, in thymus tissues (Figure 7). ~~A nucleic acid comprising the cDNA encoding the full length *hIL-1L1* protein was deposited at the American Type Culture Collection (1801 University Boulevard, Manassas, VA 20110-2209; (703) 365-2700) on XXXX, XX, 1999 and has been assigned ATCC Designation No. XXXXXX.~~ The *hIL-1L1* gene transcript includes a particularly long, approximately 2 kb 3' untranslated region (UTR).

Amend the first full paragraph on page 4 as follows:

The murine homolog of *hIL-1L1* has also been isolated and is herein referred to as *mIL-1L1*. The 1284 nucleotide *mIL-1L1* gene transcript is shown in Figure 2 (SEQ ID No. 4) and includes 5' and 3' untranslated regions and a 465 nucleotide open reading frame encoding a 155 amino acid *mIL-1L1* polypeptide shown in Figure 3B (SEQ ID No. 6). The *mIL-1L1* polypeptide sequence is 90% identical to that of *hIL-1L1* (Figure 4), indicating that the encoded IL-1L1 product has been highly conserved throughout evolution. ~~A nucleic acid comprising the cDNA encoding the murine IL-1L1 polypeptide was deposited at the American Type Culture Collection (12301 Parklawn Drive, Rockville, MD) on XXX XX, 1999 and has been assigned ATCC Designation No. XXXXXX.~~ The *mIL-1L1* gene transcript includes an approximately 0.7 kb 3' UTR. The *mIL-1L1* 3' UTR shares limited homology with the 3'UTR of *hIL-1L1*. A 41 nucleotide conserved consensus sequence corresponding to 5'-ACAATNAAAANCCNGATNCTGGTCTCTANTCNCATNAAAA-3' (SEQ ID No. 12) is found beginning at nucleotide 1137 of SEQ ID No. 1 (*hIL-1L1*) and beginning at nucleotide 1146 of SEQ ID No. 4 (*mIL-1L1*).

Amend the first full paragraph beginning on page 5 as follows:

In one aspect, the invention features isolated IL-1L1 nucleic acid molecules. In one embodiment, the IL-1L1 nucleic acid is from a vertebrate. In a preferred embodiment, the IL-1L1 nucleic acid is from a mammal, e.g. a human. In an even more preferred embodiment, the nucleic acid has the nucleic acid sequence set forth in SEQ ID No. 1 or a portion thereof or comprises one of the ~~the~~ alternative 5' ends specified in SEQ ID No. 2 or 3. In another embodiment of the invention, the nucleic acid is murine in origin and has the nucleic acid sequence set forth in SEQ ID No. 4 or a portion thereof. The disclosed molecules can be non-coding, (e.g. a probe, antisense, or ribozyme molecule) or can encode a functional IL-1L1 polypeptide (e.g. a polypeptide which specifically modulates biological activity by acting as either an agonist or antagonist of at least one bioactivity of the human IL-1L1 polypeptide). In one embodiment, the nucleic acid molecule can hybridize to ~~the SEQ ID NO:1 IL-1L1 gene contained in ATCC designation number XXXXXX (hIL-1L1) or XXXXXX SEQ ID NO:4 (mIL-1L1)~~. In another embodiment, the nucleic acid of the present invention can hybridize to a vertebrate *IL-1L1* gene or to the complement of a vertebrate *IL-1L1* gene. In a further embodiment, the claimed nucleic acid can hybridize with a nucleic acid sequence shown in Figure 1 (SEQ ID Nos. 1, 2 or 3) or a complement thereof. In another embodiment, the claimed nucleic acid can hybridize with a nucleic acid sequence shown in Figure 2 (SEQ ID Nos. 4) or a complement thereof. In a preferred embodiment, the hybridization is conducted under mildly stringent or stringent conditions.

Amend the second paragraph beginning on page 5 as follows:

In further embodiments, the nucleic acid molecule is an IL-1L1 nucleic acid that is at least about 70%, preferably about 80%, more preferably about 85%, and even more preferably at least about 90% or 95% homologous to the nucleic acid shown as SEQ ID Nos. 1, 2, 3, or 4 or to the complement of the nucleic acid shown as SEQ ID Nos. 1, 2, 3, or 4. ~~In a further embodiment, the nucleic acid molecule is an IL-1L1 nucleic acid that is at least about 70%, preferably at least about 80%, more preferably at least about 85% and even more preferably at least about 90% or 95% similar in sequence to the IL-1L1 nucleic acid contained in ATCC designation number XXXXXX or ATCC designation number XXXXXX.~~

Amend the second paragraph beginning on page 33 as follows:

The invention provides IL-1L1 nucleic acids, homologs thereof, and portions thereof. Preferred nucleic acids have a sequence at least about 60%, 61%, 62%, 63%, 64%, 65%, 66%, 67%, 68%, 69%, 70%, 71%, 72%, 73%, 74%, 75%, 76%, 77%, 78%, 79%, 80%, and more preferably 85% homologous and more preferably 90% and more preferably 95% and even more preferably at least 99% homologous with a nucleotide sequence of an IL-1L1 gene, e.g., such as a sequence shown in one of SEQ ID Nos: 1, 2, 3, or 4 or complement thereof ~~of the IL-1L1 nucleic acids having ATCC Designation No. XXXXXX or No. XXXXXX~~. Nucleic acids at least 90%, more preferably 95%, and most preferably at least about 98-99% identical with a nucleic sequence represented in one of SEQ ID Nos. 1, 2, 3, or 4 or complement thereof are of course also within the scope of the invention. In preferred embodiments, the nucleic acid is mammalian and in particularly preferred embodiments, includes all or a portion of the nucleotide sequence corresponding to the coding region such as the nucleic acid set forth in SEQ ID No. 10 or 11 which correspond to the human and murine IL-1L1 ORF sequences contained within the IL-1L1 cDNA sequences of SEQ ID Nos. 1 or 4 respectively.

Amend the first full paragraph beginning on page 35 as follows:

Another aspect of the invention provides a nucleic acid which hybridizes under stringent conditions to a nucleic acid represented by SEQ ID Nos. 1, 2, 3, or 4 or complement thereof ~~or the nucleic acids having ATCC Designation No. XXXXXX or No. XXXXXX~~. Appropriate stringency conditions which promote DNA hybridization, for example, 6.0 x sodium chloride/sodium citrate (SSC) at about 45°C, followed by a wash of 2.0 x SSC at 50°C, are known to those skilled in the art or can be found in Current Protocols in Molecular Biology, John Wiley & Sons, N.Y. (1989), 6.3.1-6.3.6 or in Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Press (1989). For example, the salt concentration in the wash step can be selected from a low stringency of about 2.0 x SSC at 50 °C to a high stringency of about 0.2 x SSC at 50 °C. In addition, the temperature in the wash step can be increased from low stringency conditions at room temperature, about 22 °C, to high stringency conditions at about 65°C. Both temperature and salt may be varied, or temperature and salt concentration may be held constant while the other variable is changed. In a preferred embodiment, an IL-1L1 nucleic acid of the present invention will bind to one of SEQ ID Nos. 1, 2, 3, or 4 or complement thereof under moderately stringent conditions, for example at about 2.0 x SSC and about 40 °C. In a particularly preferred embodiment, an IL-1L1 nucleic acid of the present invention will bind to

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U.S.S.N. 09/617,720

one of SEQ ID Nos. 1, 2, 3, or 4 or complement thereof under high stringency conditions. In another particularly preferred embodiment, an IL-1L1 nucleic acid sequence of the present invention will bind to one of SEQ ID Nos. 10 or 11, which correspond to IL-1L1 ORF nucleic acid sequences, under high stringency conditions.